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Date/Date

23. 07. 2003

Zeichen/Ref./Réf. M 8631/WM	Anmeldung Nr./Application No./Demande n°/Patent Nr./Patent No./Brevet n° 60943309.5
Anmelder/Applicant/Demandeur/Propriétaire/Titulaire Marchosky, J. Alexander	

## COMMUNICATION

The European Patent Office herewith transmits

- ☐ the European search report
- ☐ the declaration under Rule 45 EPC
- ☐ the partial European search report under Rule 45 EPC
- ☒ the supplementary European search report concerning the international application under Article 157(2) EPC relating to the above-mentioned European patent application. Copies of the documents cited in the search report are enclosed.

The following specifications given by the applicant have been approved by the Search Division :

- ☐ Abstract
  - ☐ Title
  - ☐ Figure
  - ☐ The abstract was modified by the Search Division and the definitive text is attached to this communication.
  - ☐ The following figure will be published with the abstract, since the Search Division considers that it better characterises the invention than the one indicated by the applicant.
- Figure:
- ☒ Additional copy(ies) of the documents cited in the European search report.

## REFUND OF THE SEARCH FEE

If applicable under Article 10 Rules relating to fees, a separate communication from the Receiving Section on the refund of the search fee will be sent later.



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**SUPPLEMENTARY  
PARTIAL EUROPEAN SEARCH REPORT**

Application Number

which under Rule 45 of the European Patent Convention EP 00 94 3309  
shall be considered, for the purposes of subsequent  
proceedings, as the European search report

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Incl.7)
X	EP 0 522 569 A (UNITED STATES SURGICAL CORP) 13 January 1993 (1993-01-13) * page 4, line 39 - line 42; claim 17 *	1-5, 56-60	C12N5/00 A61F13/00 A61L27/00 A61K35/32 A61P19/00
Y	WO 91 01720 A (AUFDEMORTE THOMAS BRUCE ;FOX WILLIAM CASEY (US); HOLT GEORGE RICHA) 21 February 1991 (1991-02-21) * claims 3,9,12 *	1-45, 57-60	
Y	WO 98 14222 A (CHILDRENS MEDICAL CENTER) 9 April 1998 (1998-04-09) * claims 9-11 *	1-45, 57-60	
Y	WO 97 32591 A (ORQUEST INC) 12 September 1997 (1997-09-12) * the whole document *	1-45, 57-60	
Y	WO 98 40113 A (GROOMS JAMIE M ;UNIV FLORIDA (US); WIRONEN JOHN F (US); UNIV FLORI) 17 September 1998 (1998-09-17) claims	1-45, 57-60	
			TECHNICAL FIELDS SEARCHED (Incl.7)
			A61K A61F A61L A61P
The supplementary search report has been based on the last set of claims valid and available at the start of the search.			
<b>INCOMPLETE SEARCH</b>			
The Search Division considers that the present application, or some or all of its claims, does/do not comply with the EPC to such an extent that a meaningful search into the state of the art cannot be carried out, or can only be carried out partially, for the following claims:			
Claims searched completely:			
Claims searched incompletely:			
Claims not searched:			
Reason for the limitation of the search:			
Although claims 57-60 are directed to a method of treatment of the human/animal body (Article 52(4) EPC), the search has been carried out and based on the alleged effects of the composition.			
Place of search		Date of completion of the search	Examiner
MUNICH		11 June 2003	Thalmair, M
CATEGORY OF CITED DOCUMENTS			
X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document			
T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons *: member of the same patent family, corresponding document			

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EP FORM 1505 (2.9.92) (mod.07)

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# PARTIAL EUROPEAN SEARCH REPORT

Application Number  
EP 00 94 3309

DOCUMENTS CONSIDERED TO BE RELEVANT			CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	
Y	US 5 702 716 A (DUNN RICHARD L ET AL) 30 December 1997 (1997-12-30) * column 4, line 31 * * column 10, last paragraph - column 11, line 7 *	1-4	
Y	EP 0 312 208 A (ETHICON INC) 19 April 1989 (1989-04-19) * claims 4, 10, 11 *	1-4	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)

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EPO FORM 1403 03/82 (P04C17)



### CLAIMS INCURRING FEES

The present European patent application comprised at the time of filing more than ten claims.

- ☐ Only part of the claims have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims and for those claims for which claims fees have been paid, namely claim(s):
- ☐ No claims fees have been paid within the prescribed time limit. The present European search report has been drawn up for the first ten claims.

### LACK OF UNITY OF INVENTION

The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

see sheet B

- ☐ All further search fees have been paid within the fixed time limit. The present European search report has been drawn up for all claims.
- ☐ As all searchable claims could be searched without effort justifying an additional fee, the Search Division did not invite payment of any additional fee.
- ☒ Only part of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the inventions in respect of which search fees have been paid, namely claims:  
1-45, 56-60
- ☐ None of the further search fees have been paid within the fixed time limit. The present European search report has been drawn up for those parts of the European patent application which relate to the invention first mentioned in the claims, namely claims:



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

1. Claims: 61-64

method of filling a bone defect comprising filling the bone defect with a rigid material consisting essentially of chitin or chitosan.

2. Claims: 56 (whole), 57-60 (part)

composition for promoting the growth and strengthening of bone comprising a mixture of

- hyaluronic acid,
- cancellous bone, and
- demineralized bone matrix

and method of inducing bone formation in a vertebrate applying such a composition to a site in the vertebrate where bone formation is desired.

3. Claims: 54-55 (whole), 57-60 (part)

composition for promoting the growth and strengthening of bone comprising a mixture of

- chitosan or chitosan derivative
- alginate
- cancellous bone, and
- demineralized bone matrix

and method of inducing bone formation in a vertebrate applying such a composition to a site in the vertebrate where bone formation is desired.

4. Claims: 50-53 (whole), 57-60 (part)

composition for promoting the growth and strengthening of bone comprising a mixture of

- alginate,
- calcium,
- cancellous bone, and
- demineralized bone matrix

and method of inducing bone formation in a vertebrate applying such a composition to a site in the vertebrate where bone formation is desired.

5. Claims: 46-49 (whole), 57-60 (part)

composition for promoting the growth and strengthening of bone comprising a mixture of



The Search Division considers that the present European patent application does not comply with the requirements of unity of invention and relates to several inventions or groups of inventions, namely:

- a chitosan or chitosan derivative,
- cancellous bone, and
- demineralized bone matrix

and method of inducing bone formation in a vertebrate  
applying such a composition to a site in the vertebrate  
where bone formation is desired.

6. Claims: 1-45 (whole), 57-60 (part)

composition comprising four components selected from  
(a) one or more angiogenesis-stimulating materials such as  
fibroblast growth factors, vascular endothelial growth  
factors etc.,  
(b) one or more osteoinductive materials such as  
demineralized bone matrix, non-decalcified bone matrix,  
(c) one or more scaffolding materials such as cancellous  
bone, chitosan etc.  
(d) one or more gel materials such as chitosan, alginate,  
hyaluronic acid etc.

and method of inducing bone formation in a vertebrate  
applying such a composition to a site in the vertebrate  
where bone formation is desired.